

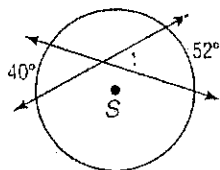
10-6 Study Guide and Intervention (continued)

Secants, Tangents, and Angle Measures

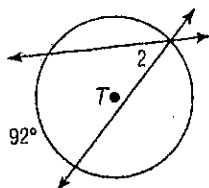
Exercises

Find each measure.

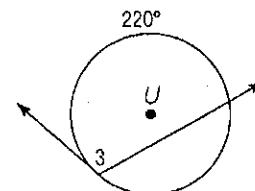
1. $m\angle 1 = 46$



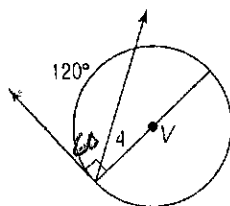
2. $m\angle 2 = 46$



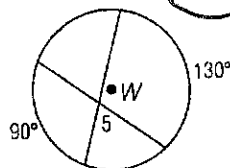
3. $m\angle 3 = 110$



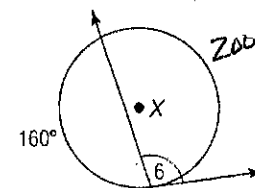
4. $m\angle 4 = 30$



5. $m\angle 5 = 110$ (70)



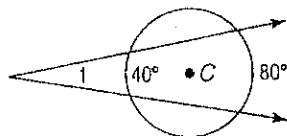
6. $m\angle 6 = 100$



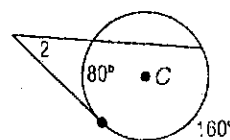
Exercises

Find each measure.

1. $m\angle 1 = 20$



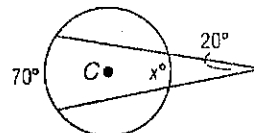
2. $m\angle 2 = 40$



3. $m\angle 3 = 40$



4. $x = 30$

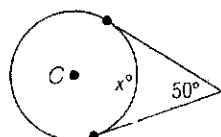


$$20 = \frac{1}{2}(70 - x)$$

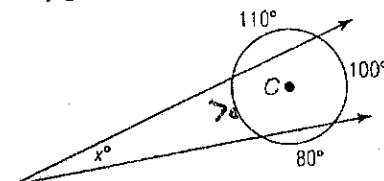
$$40 = 70 - x$$

$$30 = x$$

5. $x = 130$



6. $x = 15$

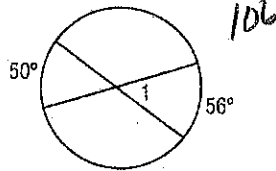


10-6 Skills Practice

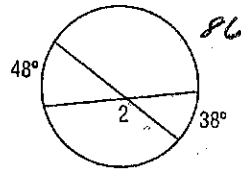
Secants, Tangents, and Angle Measures

Find each measure.

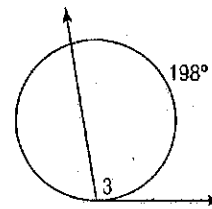
1. $m\angle 1 = 53$



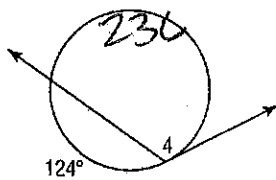
2. $m\angle 2 = 43$



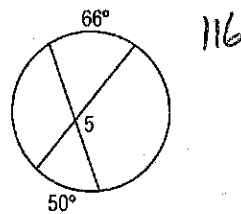
3. $m\angle 3 = 99$



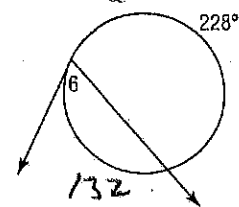
4. $m\angle 4 = 118$



5. $m\angle 5 = 58$

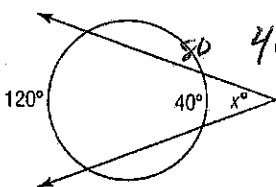


6. $m\angle 6 = 66$

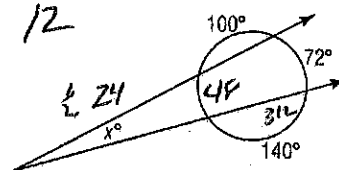


Find x . Assume that any segment that appears to be tangent is tangent.

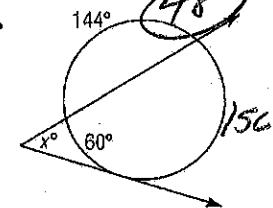
7. $x = 40$



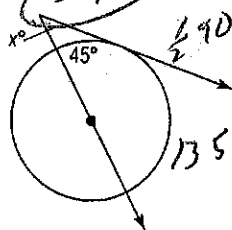
8. $x = 12$



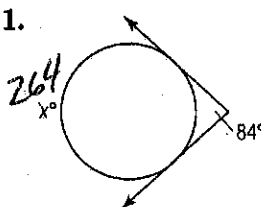
9. $x = 96$



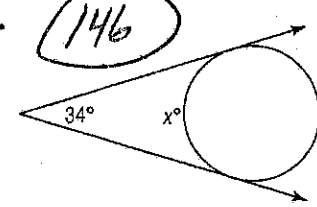
10. $x = 45$



11. $x = 84$



12. $x = 146$



$$84 = \frac{1}{2}(x - (360 - x))$$

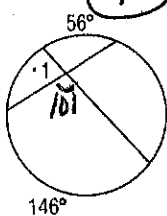
$$x - 360 + x$$

$$84 = x - 180$$

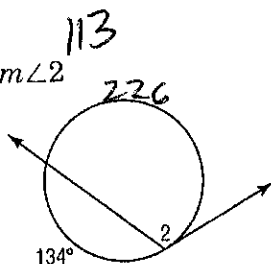
10-6 Practice**Secants, Tangents, and Angle Measures**

Find each measure.

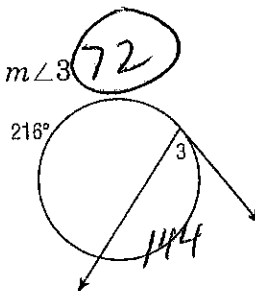
1. $m\angle 1$

**79**

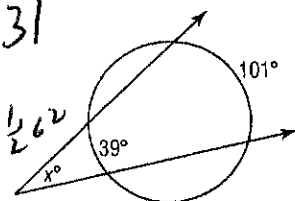
2. $m\angle 2$



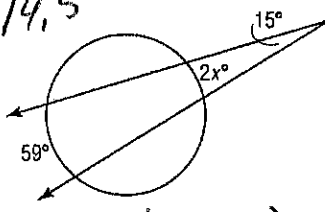
3. $m\angle 3$

**72**Find x . Assume that any segment that appears to be tangent is tangent.

7. **31**



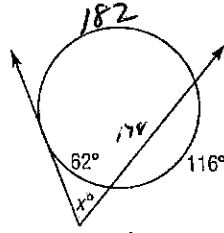
8. **14.5**



$$15 = \frac{1}{2}(59 - 2x)$$

$$30 = 59 - 2x$$

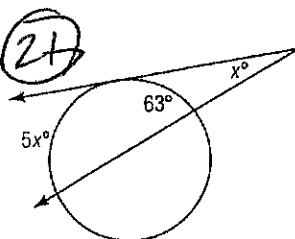
9. **182**



$$\frac{1}{2}120$$

60

10. **24**



$$x = \frac{1}{2}(5x - 63)$$

$$2x = 5x - 63$$

$$-3x = -63$$

9. RECREATION In a game of kickball, Rickie has to kick the ball through a semicircular goal to score. If $m\widehat{XZ} = 58$ and the $m\widehat{XY} = 122$, at what angle must Rickie kick the ball to score? Explain.

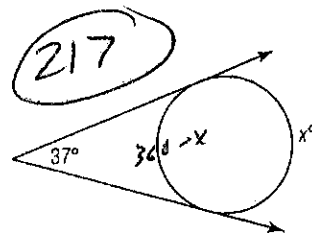
$$122$$

$$-58$$

$$64$$

32

12. **217**



$$37 = \frac{1}{2}(x - 360 + x)$$

$$x = 180$$

